



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/520,223	01/04/2005	James Anthony Barry	392-50 PCT/US	2601
7590	11/09/2005		EXAMINER	
Ronald J Baron Hoffmann & Baron 6900 Jericho Turnpike Syosset, NY 11791				RUSSELL, CHRISTINA MARIE
			ART UNIT	PAPER NUMBER
				2837

DATE MAILED: 11/09/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

AK

Office Action Summary	Application No.	Applicant(s)	
	10/520,223	BARRY, JAMES ANTHONY	
	Examiner Christina Russell	Art Unit 2837	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) Responsive to communication(s) filed on _____.
- 2a) This action is FINAL. 2b) This action is non-final.
- 3) Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) Claim(s) _____ is/are allowed.
- 6) Claim(s) 1-14 and 16-20 is/are rejected.
- 7) Claim(s) 15 is/are objected to.
- 8) Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) The specification is objected to by the Examiner.
- 10) The drawing(s) filed on 04 January 2005 is/are: a) accepted or b) objected to by the Examiner.
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) All b) Some * c) None of:
 1. Certified copies of the priority documents have been received.
 2. Certified copies of the priority documents have been received in Application No. _____.
 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)	4) <input type="checkbox"/> Interview Summary (PTO-413)
2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)	Paper No(s)/Mail Date. _____
3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>4/05</u> .	5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)
	6) <input type="checkbox"/> Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to because on page 15 of the specification there are fourteen 4k7 resistors listed but only 13 appear in the drawings. Similarly, five 0.1 microF capacitors are listed and six appear in the drawings.
2. On page 16 of the specification, one op amp TS931 ILT is listed but not labeled as U3 as U1 and U2 are.
3. Also on page 16, five transducers are listed, but the listing is generally and not easily identifiable in the drawings.
4. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New

Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

5. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference character(s) not mentioned in the description:
6. On page 18 of the specification, beginning of the last paragraph, two foot-pedal jack sockets are said to be shown in Figure 9, but reference characters are not given, I'm assuming these are J1 and J2.
7. Figure 15, reference character D is not mentioned in the specification.
8. Corrected drawing sheets in compliance with 37 CFR 1.121(d), or amendment to the specification to add the reference character(s) in the description in compliance with 37 CFR 1.121(b) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

9. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description:

10. On page 18 of the specification, first paragraph, Label K is mentioned in reference to Figure 9, but does not appear in Figure 9.

11. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

12. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(4) because reference characters "Label A, B and C" have been used to designate different menu options from Figure 10 to 19. The same reference characters cannot be used to designate different parts.

13. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate

prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

14. Claim 15 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form.

15. Claim 15 restates the interactive multimedia apparatus having at least one limited state control member and at least one dynamic range state control member. No additional elements are claimed to further limit the parent claim.

Claim Rejections - 35 USC § 112

16. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

17. Claim 20 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite in that it fails to point out what is included or excluded by the claim language. This claim is an omnibus type claim.

Claim Rejections - 35 USC § 102

18. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

19. Claims 1, 2, 4-6, 10-14, and 16-19 are rejected under 35 U.S.C. 102(b) as being anticipated by your own art (WO 01/95052).

20. In terms of claim 1, you previously claim, in the prior International Publication, an interactive multimedia apparatus, comprising a digital musical instrument having a plurality of control members including an ON/OFF state control and dynamic range or tone control. You also previously state the apparatus containing a central control unit or control unit having a storage area for digital media or music tracks and a suite of

software. You also state a second control unit or interface, comprising a processing unit and means for identifying the states of the control members and communicating those signals to the central control unit. Lastly, the ability to sense the states is stated to be accomplished by a series of transducers, each of which monitors the activation of the separate range state control members (see Fig 1, page 2, lines 6-22, page 3, lines 20-23, page 4, lines 7-20, page 5, lines 1-3, page 6, lines 9-11 and 22-25, page 7, lines 7-8, page 8, lines 17-18, page 9, line 12, page 10, line 8, page 10, line 18 – page 11, line 20, page 12, line 26 – page 13, line 14, and page 14, lines 8-15).

21. As for claim 2, you previously state the transducers being of the magnetic kind (see page 6, line 20 and page 14, line 26 – page 15, line 1).
22. As for claim 4, you previously state the instrument as being a guitar or guitar type device (see page 6, lines 9-11).
23. As for claim 5, you state the dynamic range state control members as being strings of the guitar or stringed instrument type device (see page 6, lines 9-11, page 9, lines 6-8 and 17-22, page 10, lines 15-19, page 14, lines 8-10 and page 15, lines 2-6 and 15-17).
24. As for claim 6, dependent on claim 5 and further claim 1, you previously show, as you do in your present drawings, and state, the transducers monitoring the individual strings and converting their movement into electrical signals (see Figure 4 (43) and page 6, lines 9-11).
25. As for claim 10, you previously state the central control unit, or just control unit as referred to as in the reference, as having a visual display unit used by the software of

the control unit to display user options (see page 2, lines 13-22, page 4, lines 14-20, page 5, lines 20-23, page 7, lines 13-19 and page 13, lines 9-13).

26. As for claim 11, dependent upon claim 10, you state in your prior publication, the control unit or interface as the reference refers to it as, has a control panel or pad comprising control members or switches for navigating through the software options and operate the apparatus (see page 6, lines 13-18, page 7, lines 17-19, page 9, lines 17-24, page 10, lines 4-6 and page 15, lines 21-25).

27. As for claim 12, further dependent upon claim 11, you state in the prior publication, the central control unit, or simply control unit, has a memory or storage for storing user preferences and media, and the ability to access these from such a storage area using the software in response to an activation of a control member by the user. After accessing this storage area, the software is able to open, modify, add and change parameters and effects of the folders contained within (see page 2, lines 10-11 and 24-25, page 3, lines 1-2, page 4, lines 17-20 and 28-29, page 5, lines 1-18, page 11, lines 14-19 and page 14, lines 17-23).

28. As for claim 13, it is stated in the referenced publication, that indicators are provided on the digital instrument and are controllable by the above mentioned software of the control unit, in response to the users activation of certain control members. These indicators allow the user to see which range state control members have been activated (see page 14, lines 4-5 and page 15, lines 1-11).

29. As for claim 14, dependent upon claim 13, the publication further describes these indicators as light emitting diodes or L.E.D.s that light in response to the strumming of the strings (see again page 15, lines 1-11).

30. As for claim 16, dependent upon claim 1, you previously state the presence of multiple limited state control members and than further mention three possible states, and the previous drawings show 5 or 6 dynamic range state control members, or strings, depending on the Figure (see page 5, lines 1-3, page 10, lines 18-19, Fig 4 and Fig 10).

31. As for claim 17, it is previously stated that each control member is associated with a given file stored in the central control unit (see page 5, lines 5-8).

32. As for claim 18, it is previously stated in the publication that at least some of the digital audio files are recorded instrument notes, from multiple stringed instruments such as guitars or basses (see page 3, lines 25-26 and page 5, line 28 – page 6, line 7).

33. As for claim 19, you state in the referenced publication that the apparatus is able to store chords and sequences of chords, or scales, containing note associations, and the ability to associate the correct chord or progression with what the user is attempting to play (see page 3, line 25 – page 4, line 3, page 9 lines 6-8 and page 10, lines 1-2).

Claim Rejections - 35 USC § 103

34. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

35. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over your own prior art in view of Juszkiewicz (5,455,381).

36. In your prior publication you teach all the above claimed elements except for the use of a piezo-electric transducer from a family of either ceramic, film or crystal piezo-electric transducers. Juszkiewicz does however teach the use of such a transducer (see column 7, lines 41-61). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to use such a well known, and according to Juszkiewicz, the most commonly used type of transducer for utilizing electric pickup in stringed instruments (see background section), in an invention involving the need for an electric pickup for a guitar type device.

37. Claims 7-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over your own prior art in view of De Armond et al. (2,986,953).

38. As for claim 7, you teach in your prior publication all the above claimed elements of claim 1, except for the use of a foot pedal as a dynamic range state control member. De Armond et al. does however teach the use of such a device (see column 1, lines 8-27). It would have been obvious to one of ordinary skill in the art, at the time of the

invention, to provide a foot pedal as an additional control member in order to give the user of the instrument more freedom and expression. The foot pedal allows for broader interpretations of musical pieces and provides the user with greater sensitivity and response to the control and adjustments of musical characteristics.

39. As for claim 8, you teach all the above claimed elements of claim 1, including the monitoring of control elements by a potentiometer (see page 7, lines 1-2 and page 9, lines 17-24), but again you do not teach of one of the above mentioned control members being a foot pedal. De Armond et al. again teaches such a use for a foot pedal, and further teaches the presence of potentiometers in such a device (see column 2, lines 12-21, column 4, lines 46-49, 54-57 and 62-64, and column 5, lines 35-54), therefore it would have been obvious to one of ordinary skill in the art to add such a control member for the above mentioned reasons along with De Armond et al.'s teaches that potentiometers as control and monitoring devices are common in tone related devices.

40. Lastly, for claim 9, you again teach the above claimed elements including the ability to modify such elements as volume and special effects (see page 6, lines 13-14, page 10, lines 13-19, page 11, lines 14-19 and page 14, lines 17-23). You do not however teach of the use of a foot pedal to control and modify such things. De Armond et al. does teach the ability of a foot pedal to control and modify such elements (see column 1, lines 8-27 and column 5, lines 32-35). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to incorporate a well known control device for stringed instruments, such as a foot pedal, with the ability to vary certain tonal

elements, into a multimedia device comprising a guitar like device, which already possesses the ability to take on certain control members and alter and modify particular tonal elements.

Conclusion

41. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The US patents to Bonanno (4,630,520) and (4,468,999).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christina Russell whose telephone number is 571-272-4350. The examiner can normally be reached on Mon-Fri, 8-4.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Martin can be reached on 571-272-2107. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

CR
10/20/2005



DAM
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2800